MEMORANDUM

SUBJECT: Request for a Consultation on the Clean-up Action Level for the Delfasco

Forge Site, Grand Prairie, Dallas County, Texas

FROM: Gregory E. Fife, Senior On-Scene Coordinator

Removal Site Section (6SF-PR)

TO: George Pettigrew/Jennifer Lyke

ATSDR

PURPOSE:

I am requesting a consultation on the appropriateness of a proposed clean-up action level for the Delfasco Forge Site (Site). EPA will be using the action level to make decisions to include the homes in a Removal Action mitigation. The action level is for air concentrations of trichloroethylene (TCE) inside homes and possibly some businesses.

BACKGROUND:

The Delfasco Forge Site is the location of a former forge and foundry as well as the area adjacent to the former facility. The area is primarily residential but some businesses are on the perimeter of the area. There are churches and schools that are either in the current Site or could be included as the investigation continues to define the Site perimeter. The cause of concern is vapor intrusion from a TCE contaminated groundwater plume emanating from the former facility.

A studies conducted by Delfasco has found a groundwater plume extending under the homes. A subsequent study by EPA's RCRA program has found TCE in homes above the groundwater plume. The EPA study utilized the accepted method using Summa canisters to collect the air inside homes. RCRA also employed the mobile Trace Atmospheric Gas Analyzer laboratory (TAGA) and sampled air inside homes and in crawl spaces.

TCE can also originate from non-environmental sources such as household chemicals, hobbies, repairs, and remodeling work. The EPA study attempted to identify and remove those sources/

RECOMMENDATION:

This recommendation is based on discussions and surveys of other regions and agencies regarding previous mitigation efforts. The action level on those sites were based on risk assessment. This recommendation is also based on considering recommendations from EPA's toxicologists and the Texas Risk Reduction Program's

(TRRP) value.

The recommendation also considers risk management principles, feasibility, priorities and cost effectiveness.

TCE concentration in indoor	EPA Risk Management Considerations
air	
$< 1 \text{ ug/m}^3$	Generally not of concern; no mitigation action likely
$1-10 \text{ ug/m}^3$	May be of concern, depending upon multiple
	considerations (identified in narrative below)
$10 - 100 \text{ ug/m}^3$	- Likely to be of concern
	- Removal action possible dependent on multiple
	considerations (identified in narrative below)
$> 100 \text{ ug/m}^3$	- Likely to be of concern even for shorter-term
	exposure;
	- Removal action/exposure mitigation likely

Additional considerations that may influence a risk manager's decision regarding mitigative action include:

- the presence of other chemicals,
- intensity of the subsurface source (i.e. concentrations of sub-slab, soil vapor or groundwater chemical concentrations),
- the presence of sensitive subpopulations (e.g., young children, home occupants who are disease compromised),
- the duration of exposure to vapor intrusion chemicals,
- location of indoor air concentrations (e.g., frequently occupied living space or rarely used basement)
- others dependent on the site-specific situation.

CONCLUSION:

Please provide a health based consultation of the recommended action level. I will be happy to discuss the issues with you and provide additional information if needed. I can be reached at 5-6773 which is also forwarded to my cell phone.